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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,961	11/21/2003	Franz Heilmeier	080437.52869US	8021

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EXAMINER

BRYANT, DAVID P

ART UNIT	PAPER NUMBER
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3726

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/717,961

Applicant(s)

HEILMEIER ET AL.

Examiner

David P. Bryant

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
4a) Of the above claim(s) 31 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-30 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

This application contains claim 31, drawn to an invention nonelected with traverse in the paper filed September 13, 2004. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 8-10, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Krajewski et al. (U.S. Patent No. 5,948,185).

Krajewski et al. teach the claimed invention, as outlined below:

Claim 1: A method for producing a structural component for a motor vehicle (e.g. a hood, as disclosed in column 3, lines 39-41), including at least two shell sections **10, 28** (see column 3, line 57 through column 4, line 16) that are attached to one another along flanges **12**, comprising attaching the shell sections of the structural component to one another by flanging (or “hemming” as shown in Figures 3 and 4).

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The recitation for a “load-bearing” structural component is met by Krajewski et al., as the structural component produced thereby is inherently capable of bearing at least a minimal load.

Claims 5: The shell sections are made of aluminum alloy, as disclosed in column 3, lines 8-10.

Claims 8-10: See Figure 2 and column 4, lines 17-57.

Claim 12: The automobile hood of Krajewski et al. can be considered “an elongated support component.”

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3, 6, 7, 13, 16, 17, 19-21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krajewski et al. (U.S. Patent No. 5,948,185).

Claims 2 and 3: In column 3, lines 49-52, it is disclosed that a “suitable” adhesive is applied to the flanged surface of at least one of the shell sections prior to flanging. There is no explicit disclosure as to whether the adhesive is “very strong and highly rigid after hardening” or is “a single-component epoxy adhesive” as claimed. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used such an adhesive between the flanged shell sections to ensure a rigid, inseparable bond between the two shell sections. (It is noted that it has been held that the selection of a known material on the basis of its

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suitability for the intended use is a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.)

Claims 6, 7, 13, 19-21, and 23: As disclosed in columns 3-4, the inner and outer shell sections are stamped to their respective shapes in a series of mechanical dies, adhesive is then applied to at least one of the shell sections, and the shell sections are then flanged together using hemming dies 30, 32. From this disclosure, it is clear that there is a pressing line to form the shell sections, a station at which adhesive is applied to the shell sections, and a flanging station for performing the flanging step. However, it is unclear whether these stations are arranged in a continuous, assembly line fashion (as recited in claims 6, 13, 19, and 20) or whether the adhesive is applied automatically at its respective station (as recited in claims 7 and 21). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have aligned the stations of Krajewski et al. in assembly line fashion, and to automatically apply adhesive to the shell sections at the adhesive applying station, as the examiner takes Official notice that automobiles and automobile subassemblies are conventionally assembled in assembly lines to enable continuous, efficient assembly of parts.

Claims 16 and 17: The shell sections are made of aluminum alloy, as disclosed in column 3, lines 8-10.

Claims 4, 14, 15, 18, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krajewski et al. (U.S. Patent No. 5,948,185) in view of Develay et al. (U.S. Patent No. 4,000,007).

Claims 4, 14, and 15: Krajewski et al. disclose the inner and outer shell sections of the vehicle hood to be formed by “stamping” rather than “deep drawn” as claimed.

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Develay et al. disclose that inner and outer automobile panels can be formed by stamping, pressing, or deep drawing prior to hemming the panels together. See column 1, lines 12-19; and column 3, lines 26-32.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the inner and outer shell sections of the hood of Krajewski et al. by deep drawing rather than stamping, since the two have been shown to be functionally equivalent processes for forming automobile panels and in view of the inherent suggestion in Develay et al. that the selection between either process is merely a matter of design choice.

Claim 18: The shell sections are made of aluminum alloy, as disclosed in column 3, lines 8-10.

Claim 22: As disclosed in columns 3-4, the inner and outer shell sections are stamped to their respective shapes in a series of mechanical dies, and the shell sections are then flanged together using dies 30, 32. From this disclosure, it is clear that there is a pressing line to form the shell sections, and a flanging station for performing the flanging step. However, it is unclear whether these stations are arranged in a continuous, assembly line fashion. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have aligned the stations of Krajewski et al. in assembly line fashion, as the examiner takes Official notice that automobiles and automobile subassemblies are conventionally assembled in assembly lines to enable continuous, efficient assembly of parts.

Claims 11, 24-29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krajewski et al. (U.S. Patent No. 5,948,185) in view of St. Denis (U.S. Patent No. 5,587,042).

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Krajewski et al. fail to teach a heat-generating device positioned in a recess of a hemming die for heating the shell section(s) during flanging.

St. Denis teaches a hemming die **44** having a heat-generating device **52** disposed in a recess **53** therein to apply heat to the flange **16** of an inner shell section **14** during hemming. See Figures 2 and 6B; and column 4, lines 19-33.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a heat-generating device within the hemming dies of Krajewski et al., as taught by St. Denis, to cure the adhesive applied in the flanged area during flanging.

Response to Arguments

Applicant's arguments filed February 2, 2005, have been fully considered but they are not persuasive.

Applicant argues that Krajewski et al. fail to teach the formation of a "load-bearing" structural member. However, the structural member of Krajewski et al. will support at least a minimal load, and thus meets the limitations of the claimed invention.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David P. Bryant whose telephone number is (571) 272-4526. The examiner can normally be reached on Monday-Thursday (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (571) 272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David P. Bryant
Primary Examiner
Art Unit 3726

dpb
4/20/05